

2) a master gaming controller for controlling one or more games of chance played on the gaming machine located within the interior of the gaming machine; 3) a main display for displaying the game of chance; and 4) an interface display for inputting and outputting gaming information mounted to an exterior surface of the gaming machine cabinet, in communication with the master gaming controller and separate from the main display. The interface display may be generally characterized as comprising: a) a substrate; b) a plurality of electro-luminescent elements formed in a light emitting layer on the substrate for outputting gaming information; c) a plurality of input areas for inputting gaming information that are illuminated by one or more of the electro-luminescent elements; d) a plurality of sensors for detecting selections of the input areas; and e) one or more controllers for controlling the plurality of electro-luminescent elements and for controlling the plurality of sensors. The plurality of sensors may be formed in a sensor layer and are activated by at least one of contact with an object and a proximity of an object, such as finger or a stylus. The sensor layer is at least one of a capacitive touch screen, a resistive touch screen, a wave touch screen and combinations thereof.

[0021] The one or more games of chance may be selected from the group consisting of video slot games, mechanical slot games, video black jack games, video poker games, video keno games, video pachinko games, video card games, video games of chance and combinations thereof. A portion of the input areas may be used for inputting gaming information for playing a game of chance on the gaming machine. Further, the portion of the input areas for inputting gaming information for playing the game of chance may be dynamically configurable to display different input selections used by different types of games of chance played on the gaming machine.

[0022] Yet another aspect of the present invention provides a gaming machine. The gaming machine may be generally characterized as comprising: 1) a gaming machine cabinet; 2) a master gaming controller for controlling one or more games of chance played on the gaming machine located within the interior of the gaming machine; 3) a main display for displaying the game of chance; 4) a player tracking unit mounted to the gaming machine cabinet and in communication with the master gaming controller and a player tracking server. The player tracking unit may be generally characterized as comprising: a) a player tracking controller; b) one or more player tracking devices; and c) an interface display for inputting and outputting player tracking information mounted to an exterior surface of the gaming machine cabinet, in communication with the player tracking controller and separate from the main display where the interface display comprises: i) a substrate; ii) a plurality of electro-luminescent elements formed in a light emitting layer on the substrate for outputting gaming information; iii) a plurality of input areas for inputting gaming information that are illuminated by one or more of the electro-luminescent elements; iv) a plurality of sensors for detecting selections of the input areas; and v) one or more controllers for controlling the plurality of electro-luminescent elements and for controlling the plurality of sensors. The interface display may be mounted to an exterior surface of the player tracking unit. Further, the interface display may communicate with the master gaming controller and may be operable to allow control by the master gaming controller.

[0023] Another aspect of the invention pertains to computer program products including a machine-readable medium on which is stored program instructions for implementing any of the methods described above. Any of the methods of this invention may be represented as program instructions and/or data structures, databases, etc. that can be provided on such computer readable media such as smart card, compact flash memory card, memory stick, RAM, CD-ROM, CD-DVD, hard drive, etc.

[0024] These and other features and advantages of the invention will be spelled out in more detail below with reference to the associated drawings.

#### BRIEF DESCRIPTION OF THE DRAWINGS

[0025] FIGS. 1A-1B are block diagrams of thin interface displays for embodiments of the present invention.

[0026] FIG. 2 is a perspective drawing of a video gaming machine of the present invention.

[0027] FIGS. 3A and 3B are block diagrams of a player tracking interface display (PTID) 200.

[0028] FIGS. 4A and 4B are block diagrams of a game input interface display (GIID) 700.

[0029] FIG. 5 is a block diagram of a game service interface display (GSID) 250 of the present invention.

[0030] FIGS. 6A and 6B depicts an electro-luminescent portion 400 of the player tracking interface display 200 shown in FIG. 3A in greater detail.

[0031] FIG. 7 is a block diagram of an Organic Light Emitting Diode (OLED) that may be used with the present invention.

[0032] FIGS. 8A-8D are block diagrams of sensor layers mounted to light emitting layers for some embodiments of the present invention.

[0033] FIG. 9 is a block diagram of a player tracking system and a gaming machine with interface displays of the present invention.

[0034] FIG. 10 is a block diagram of a number of gaming machines with player tracking units connected to a player tracking server.

#### DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0035] In the present invention, thin light-emitting interface displays that may be mounted to a surface on the gaming machine are described. The light-emitting elements used in the interface displays may be provided from a plurality of electro-luminescent elements. An electro-luminescent element may be formed in a pattern, such as a symbol or may be formed as a pixel in matrix of electro-luminescent elements. An organic light emitting diode (OLED) elements is one example of an electro-luminescent element that may be used with the present invention.

[0036] The thin light-emitting interface displays may be used to input and output gaming information on the gaming machine. The gaming information that is input and output via the interface display may be used to provide: 1) a game of chance played on the gaming machine, 2) player tracking services, 3) game services available on the gaming machine